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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,425	01/26/2001	Xaveer Van Ostade	4644US	8053

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EXAMINER

LI, RUIXIANG

ART UNIT

PAPER NUMBER

1646

DATE MAILED: 01/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/771,425

Applicant(s)

OSTADE ET AL.

Examiner

Ruixiang Li

Art Unit

1646

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 December 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☒ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-11, 14-19 and 21-23.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

*Elizabeth C. Kemmerer*

ELIZABETH KEMMERER  
PATENT EXAMINER

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

\*Continuation of 2. NOTE: New claim 24 raises the following new issues: (i) it recites the term "interfering", which is indefinite because it implies either "enhancing" or "inhibiting" and an antagonist can not enhance ligand-receptor binding; (ii) it recites "assaying the activity of each compound" without clearly pointing out what activity of each compound will be assayed; and (iii) it recites "based on said assaying, determining the presence of an antagonist". It is unclear what results of the assay are required to determine the presence of an antagonist.

Continuation of 5. does NOT place the application in condition for allowance because:

The rejection of claims 15-19 under 35 U.S.C. 112, 2nd paragraph remains. It is unclear how the method can screen for an orphan receptor and its unknown ligands at the same time. It appears that the preamble of the claim should read as "A method of screening for ligands of an orphan receptor". In addition, the steps of the method fails to point out how to determine whether a test compound is a ligand of the orphan receptor.

The rejection of claims 1-11, 14-19, 21-23 under 35 U.S.C. (a) also remains. Applicants argue that (i) that the Office action has not indicated where a motivation or suggestion exists in the cited references to combine them; and (ii) that because no reasonable expectation of success exists in combining the cited references, a prima facie case of obviousness cannot be established. This has been fully considered but is not deemed to be persuasive for the reasons set forth in the previous office action in Paper No. 13.

Applicants argue that mammalian cells express many potential interfering receptors. This is not found to be persuasive because Trueheart et al. teach methods for identifying receptor agonists or antagonists in mammalian cells comprising an autocrine system (page 20).

Applicants further argue that the responsive CHO cells of Muthukumaran et al. are not normal mammalian cells. This has been fully considered but is not deemed to be persuasive for the following reasons. The CHO-B7 cells transfected with IFN-gammaR2 or gammaR2/EPOR cDNA showed no response to Hu-IFN-gammaR1 due to lack of the ligand-binding receptor subunit Hu-IFN-gammaR1. One skilled in the art would expect the same result. On the other hand, the parental CHO-16-9 cells which express Hu-IFN-gammaR1, when stably transfected with expression vectors encoding Hu-IFN-gammaR2 cDNA or gammaR2/EpoR chimera receptor exhibited response to Hu-IFN-gamma. Muthukumaran et al. further teach various chimeric receptors between the EpoR and Hu-IFN-gammaR1 and Hu-IFN-gammaR2 subunits (left column of page 4995). For example, the chimeric receptor, EpoR/gammaR1.EpoR/gammaR2 heterodimer is a fully functional receptor complex and responds to Epo (Abstract; right column of page 4995). Therefore, the CHO cells of Muthukumaran et al. are not abnormal, but unique in that the transfected chimeric receptors function specifically in response to Hu-IFN-gammaR1 or Epo.